From: Shneiderman, Ben

To: 'Microsoft.atr(a)usdoj.gov'

Date: 12/21/01 5:51pm

Subject: comment on behalf of consumers

Much of the discussion of settlement terms focuses on strategies that promote competition. This is fine, but some method of assessment of the benefit to consumers and computer users might be an appropriate addition.

The current level of user frustration is high - one survey of 6000 users reports that an average of 6.1 hours a week are wasted. This drain on productivity could amount to \$100B annually in the US alone. Although there are few reliable statistics about the top ten sources of trouble and frustration, a good start has been made in collecting data about the most serious annoyance - a system crash. The web site www.bugtoaster.com presents data from its clever technology to capture data on crashes (I have no relationship with this company).

Other sources of frustration include:

- -- difficulties with installation and configuration
- -- inability to open email attachments
- -- incompatible file formats
- -- inability to complete e-commerce transactions
- -- incomprehensible instructions or dialog boxes
- -- insufficient information to isolate problems
- -- lack of feedback about system state
- -- hostile or incomprehensible error messages

I propose that Microsoft (or an outside independent agency, possibly NIST), be required to establish metrics for frequency and severity of user problems and report on these publicly on a monthly basis. This parallels what airlines do with respect to lost baggage and flight delay frequencies. Then as Microsoft and other software developers improve their software quality, measurable gains could be shown.

A basic approach would be to develop a frustration reporting mechanism that would automatically or by email enable users to register the problems they have. Such a database would help identify problem frequency and measure their severity.

I hope that this proposal generates competitive activity that benefits consumers.

Sincerely,

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